App of for use through 09/30/2000. OMB 0651-0032
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Limber the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Attorney Docket No. 1659.0870000 First Inventor or Fullerton et al UTILITY PATENT APPLICATION TRANSMITTAL Application Identifier (Only for new nonprovisional applications under 37 CFR § 1.53(b)) Apparatus, System and Method for Flip Modulation in an Impulse Radio Communications System Express Mail Label No. APPLICATION ELEMENTS Assistant Commissioner for Patents ADDRESS TO: Box Patent Application See MPEP chapter 600 concerning utility patent application contents. Washington, DC 20231 6. Microfiche Computer Program (Appendix) * Fee Transmittal Form (e.g., PTO/SB/17) 1. (Submit an original, and a duplicate for fee processing) 7. Nucleotide and/or Amino Acid Sequence Submission [Total Pages 97] 2. Specification applicable, all necessary) (preferred arrangement set forth below) OPE-perreta driving ements set form below to Descriptive title of the Invention Cross References to Related Applications Statement Regarding Fed sponsored R & D Reference to Microfiche Appendix Background of the Invention Brief Summary of the Invention Brief Description of the Drawings (if filed) a. Computer Readable Copy b. Paper Copy (identical to computer copy) Statement verifying identity of above copies - Detailed Description - Claim(s) - Abstract of the Disclosure ACCOMPANYING APPLICATION PARTS 3. 🔀 Drawing(s) (35 U.S.C. 113) [Total Sheets 33] 8. Assignment Papers (cover sheet & document(s)) 4. □ Oath or Declaration [Total Pages ____ 9. 37 CFR 3.73(b) Statement ☐ Power of Attorney a. \(\backslash\) Newly executed (original or copy) (when there is an assignee) English Translation Document (if applicable) b. Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 17 completed) 11. Information Disclosure Copies of IDS Citations INote Box 5 below! Statement (IDS)/PTO-1449 **DELETION OF INVENTOR(S)** i. Preliminary Amendment Signed statement attached deleting inventor(s) Return Receipt Postcard (MPEP 503) named in the prior application, see 37 CFR §§ 1.63(d)(2) and 1.33(b). (Should be specifically itemized) ☐ Statement filed in prior *Small Entity Statement(s) (PTO/SB/09-12) 14. 5. 🔲 Incorporation By Reference (useable if Box 4b is checked) application, Status still proper The entire disclosure of the prior application, from which a copy of the oath and desired or declaration is supplied under Box 4b, is considered as being part of the Certified Copy of Priority Document(s) disclosure of the accompanying application and is hereby incorporated by reference therein. (if foreign priority is claimed) Other: 37 C.F.R. § 1.136(a)(3) Authorization Other: *NOTE FOR ITEMS I & 14: IN ORDER TO BE ENTITLED TO PAY SMALL ENTITY FEES, A SMALL ENTITY STATEMENT IS REQUIRED (37 C.F.R § 1.27), EXCEPT IF ONE FILED IN A PRIOR APPLICATION IS RELIED UPON (37 C.F.R. §1.28). 17. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment: □ Divisional □Continuation-in-Part (CIP) of prior application No: ____/_ ☐ Continuation Group/Art Unit: Prior application information: Examiner 18. CORRESPONDENCE ADDRESS or Correspondence ☐ Customer Number or Bar Code Label (Insert Customer No. or Attach bar code label here) address below STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. NAME Suite 600, 1100 New York Avenue, N.W. ADDRESS ZIP CODE 20005-3934 STATE DC CITY Washington (202) 371-2600 FAX (202) 371-2540 COUNTRY USA **TELEPHONE** Jeffrey R. Kurin Registration No. (Attorney/Agent) NAME (Print/Type) 41,132 3/29/00 SIGNATURE Date

Burden Hour Statement: this form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

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FEE TRANSMITTAL

for FY 2000

Patent fees are subject to annual revision. Small Entity payments <u>must</u> be supported by a small entity statement, otherwise large entity fees must be paid. See Forms PTO/SB/09-12. See 37 C.F.R. §§ 1.27 and 1.28.

Complete if Known					
Application Number	(to be assigned)				
Filing Date	Herewith				
First Named Inventor	Fullerton et al.				
Examiner Name	(to be assigned)				
Group / Art Unit	(to be assigned)				
Attorney Docket Number	1659.0870000				

TOTAL AMOUNT OF PAYMENT

(\$) 0.00

METHOD OF PAYMENT (check one)	FEE CALCULATION (continued)								
1. ☑ The Commissioner is hereby authorized to charge indicated fees and credit any overpayment to:	3. ADDITIONAL FEES								
Deposit Account Number Deposit Account Sterne, Kessler, Goldstein & Fox P.L.L.C.	Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid			
Name Sterne, Ressier, Goldstein & Fox P.E.E.C.		` ,			·				
○ Charge Any Additional Fee Required Under 37 CFR §§ 1.16 and 1.17		130	205		Surcharge - late filing fee or oath				
		50	227		Surcharge - late provisional filing fee or cover sheet				
2. □ Payment Enclosed: □ Check □ Money Order □ Other* *Charge any deficiencies or credit any overpayments in the fees or fee calculations of Parts 1, 2 and 3 below to Deposit Account No. 19-0036.		130	139	130	Non-English specification				
		2,520	147	2,520	For filing a request for reexamination				
		920*	112	920*	Requesting publication of SIR prior to Examiner action				
FEE CALCULATION	113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action				
1 2400 50 00 555	115	110	215	55	Extension for reply within first month				
1. BASIC FILING FEE	116	380	216	190	Extension for reply within second month				
Large Entity Small Entity Fee Fee Fee Fee Description Fee Paid	117	870	217	435	Extension for reply within third month				
Fee Fee Fee Fee Description Fee Paid Code (\$) Code (\$)	118	1,360	218	680	Extension for reply within fourth month				
101 690 201 345 Utility filing fee	128	1,850	228		Extension for reply within fifth month				
•	119	300	219		Notice of Appeal				
	120	300	220		Filing a brief in support of an appeal				
107 480 207 240 Plant filing fee	121	260	221		Request for oral hearing				
108 690 208 334 Reissue filing fee	138	1,510	138		Petition to institute a public use proceeding				
114 150 214 75 Provisional filing fee	140 141	110	240		Petition to revive - unavoidable				
SUBTOTAL (1) (\$)0.00		1,210	241		Petition to revive - unintentional				
· · · · · · · · · · · · · · · · · · ·	142	1,210	242		Utility issue fee (or reissue)				
	143	430	243	215	Design issue fee	<u> </u>			
EXTRA CLAIM FEES Fee from Extra below Fee Paid	144	580	244	290	Plant issue fee				
Total Claims 77 - 20** = 57 X \$18.00 = \$0.00	122	130	122		Petitions to the Commissioner				
Indep. Claims 10- 3** = 7 X \$78.00 = \$0.00	123	50	123	50	Petitions related to provisional applications				
Multiple Dependent \$260.00 = \$0.00	126	240	126	240	Submission of Information Disclosure Stmt				
** or number previously paid, if greater, For Reissues, see below Large Entity Small Entity Fee Fee Fee Fee Fee Description	581	40	581	40	Recording each patent assignment per property (times number of properties)				
Code (\$) Code (\$) 103 18 203 9 Claims in excess of 20	146	760	246	380	Filing a submission after final rejection (37 CFR				
102 78 202 39 Independent claims in excess of 3					1.129(a))	[I			
104 260 204 130 Multiple dependent claim	149	760	249	380	For each additional invention to be examined (37 CFR 1.129(b))				
108 78 209 39 **Reissue independent claims over original patent	Other fee (specify) :								
110 18 210 9 **Reissue claims in excess of 20 and over original patent	Other fee (specify) : *Reduced by Basic Filing Fee Paid								
SUBTOTAL (2) (\$)		of Basic Fi	g , ee		SUBTOTAL (3) (\$)	0.00			
	<u></u>				SUBTOTAL (3) (\$)				
SUBMITTED BY Complete (if applicable)									

SUBMITTED BY		Complete (if applicable)				
Typed or Printed Name						41,132
Signature	Tellren N. N.	Date	3	29/00	Deposit Acct. User ID	

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STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C

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March 29, 2000

(202) 789-5524 INTERNET ADDRESS: JKURIN@SKGF.COM

WRITER'S DIRECT NUMBER:

Assistant Commissioner for Patents Washington, D.C. 20231

Box Patent Application

Re:

U.S. Non-Provisional Utility Patent Application under 37 C.F.R. § 1.53(b)

Appl. No. (to be assigned); Filed: Herewith

For: Apparatus, System and Method for Flip Modulation in an Impulse

Radio Communications System

Inventors:

Fullerton et al.

Our Ref:

1659.0870000

Sir:

The following documents are forwarded herewith for appropriate action by the U.S. Patent and Trademark Office:

1. U.S. Utility Patent Application entitled:

Apparatus, System and Method for Flip Modulation in an Impulse Radio Communications System

and naming as inventors:

Larry W. Fullerton James L. Richards Ivan A. Cowie David M. Dickson Vernon R. Brethour Preston Jett ₫ U

ū

Assistant Commissioner for Patents March 29, 2000 Page 2

the application comprising:

- specification containing: a.
 - 74 pages of description prior to the claims;
 - 22 pages of claims (77 claims); ii.
 - a one (1) page abstract; iii.
- 33 sheets of drawings: (Figures 1A, 1B, 2A, 2B, 3, 4, 5A, 5B, 6, 7, b. 8, 9, 10A, 10B, 11A, 11B, 12, 13, 14, 15, 16A, 16B, 17, 18, 19A, 19B, 20A, 20B, 21, 22, 23, 24, 25, 26, 27A, 27B, 28, 29, 30A, 30B, 30C, 30D, 30E, 30F, 30G, 30H, 31, 32, 33A and 33B);
- USPTO Utility Patent Application Transmittal Form PTO/SB/05; 2.
- Fee Transmittal (Form PTO/SB/17); 3.
- An Authorization to Treat a Reply As Incorporating An Extension of Time 4. Under 37 C.F.R. § 1.136(a)(3) (in duplicate); and
- 5. Two (2) return postcards.

It is respectfully requested that, of the two attached postcards, one be stamped with the filing date of these documents and returned to our courier, and the other, prepaid postcard, be stamped with the filing date and unofficial application number and returned as soon as possible.

This patent application is being submitted under 37 C.F.R. § 1.53(b) without Declaration and without filing fee.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Teffrey R. Kun

Jeffrev R. Kurin

Attorney for Applicants

Registration No. 41,132